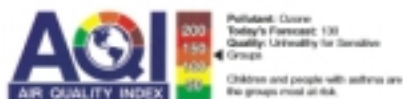


# New Air Quality Index Improves Ozone Reporting

| AIR QUALITY INDEX |                                |  |
|-------------------|--------------------------------|--|
| Index Values      | Descriptors                    | Cautionary Statements for Ozone  |
| 0 to 50           | Good                           | None   |
| 51 to 100         | Moderate                       | Unusually sensitive people should consider limiting prolonged outdoor exertion.  |
| 101 to 150        | Unhealthy for Sensitive Groups | Active children and adults, and people with respiratory disease, such as asthma, should limit prolonged outdoor exertion.  |
| 151 to 200        | Unhealthy                      | Active children and adults, and people with respiratory disease, such as asthma, should avoid prolonged outdoor exertion; everyone else, especially children, should limit prolonged outdoor exertion. |
| 201 to 300        | Very Unhealthy                 | Active children and adults, and people with respiratory disease, such as asthma, should avoid all outdoor exertion; everyone else, especially children, should limit outdoor exertion.                 |



The illustration at left shows how you might see the Air Quality Index (AQI) reported. In this example, an AQI value of 130 is reported, which means that ozone levels are unhealthy for sensitive groups.

In May of 1999, DEQ began using the Environmental Protection Agency's new Air Quality Index (AQI) as a way to educate the public on days when the high levels of ozone are forecast. The AQI index is a way to report daily air quality throughout the state and allow people to plan their day based on their associated health concerns. The index is an outreach program designed to simplify technical air quality data and make it available to the public through the media so residents can avoid strenuous activities when unhealthy levels of ozone may be present. Atly Brasher, an Engineer Supervisor with DEQ's Small Business Assistance Program, says, "It makes the public aware of ozone and its health impacts."

Ozone is an odorless, colorless gas that is present in the upper atmosphere and at ground level. Good ozone occurs naturally in the upper atmosphere and shields the Earth from dangerous ultraviolet rays. Bad ozone forms at ground level when intense sunlight reacts with the mixture of Volatile Organic Chemicals (VOCs), oxides of nitrogen, and oxygen to form the harmful pollutant.

Ozone produces a myriad of negative health effects and can hurt people of all ages. Ozone can reduce lung function and irritate the respiratory system which causes coughing, throat irritation, and tightness in the chest. The pollutant can also inflame and damage cells in the lungs. It may aggravate chronic lung conditions such as emphysema and bronchitis while also affecting those afflicted with asthma.

DEQ uses the Air Quality Index in the Baton Rouge non-attainment area (the only 5 parishes in the state that are not in compliance with the 1990 Clean Air Act) to make predictions on air quality during the ozone season that lasts from

May until September. Air quality is determined by the amount of ozone and other pollutants in the air. DEQ receives it's daily forecast from a Louisiana based weather consultant and from that information, the Agency determines if there will be possible ozone exceedances on a particular day. When air quality has the possibility of being poor, DEQ will declare that day an "Ozone Action Day" and place the announcement on the Agency's web site and hotline. The media is notified on these days and they report it to their local communities so that the public can take these steps to avoid contributing to high ozone levels:

- Limit your driving- Try not to drive at all and especially not before 10 a.m. Take your lunch to work, avoid midday trips from your workplace. For short trips consider riding your bicycle or walking. Other options include carpooling, vanpooling, working at home, faxing and teleconferencing.
- Drive "Emissionwise"- Drive your lowest emission vehicle, minimize cold starts by combining trips, avoid jack rabbit acceleration, avoid excessive idling, and avoid traffic congested areas.
- Refuel carefully- Refuel after 6:00 p.m. Avoid spills and don't try to top off your tank
- Maintain your vehicle- This helps minimize pollutant emissions and maintains fuel efficiency.
- Don't mow your lawn or use gas-powered

lawn equipment or wait until after 6:00 p.m.- Lawn care machines produce a lot of pollution. A gas-powered lawnmower produces more pollution than 70 new automobiles.

- Postpone oil-based paint and solvent use
- Barbecue with an electric starter, not fluid starters
- Conserve energy in your home
- Take public transportation
- Spread the word- Talk to coworkers and neighbors about "Ozone Action Days."

AQI values are color coded to make it easy to identify the predicted level of pollution in the air for a certain day. If a person is watching the news or reading the newspaper, they can adjust their plans for the day according to the color that they see. The colors range as follows:

- **GREEN: GOOD**
- **YELLOW: MODERATE**
- **ORANGE: UNHEALTHY FOR SENSITIVE GROUPS**
- **RED: UNHEALTHY; EVERYONE MAY EXPERIENCE HEALTH EFFECTS**
- **PURPLE: VERY UNHEALTHY**
- **MAROON: HAZARDOUS**

The AQI system is based on an eight hour standard proposed by the EPA. What this means is that over a period of eight hours, ozone cannot exceed a certain level in order for the air to be healthy. DEQ used the Pollution Standard Index (PSI) before May 1999. The PSI is based on a one hour standard which is the current national regulatory standard that DEQ still uses for its regulatory purposes. EPA's eight-hour standard for regulatory purposes is not in effect because critics challenged the standard's validity. The case is scheduled to be heard by the United States Supreme Court this year. The AQI system uses the eight-hour standard because it is not a regulatory system and it is a better way to judge ozone than a one-hour standard. EPA found that certain people can be affected at lower levels of ozone over a longer period of time.

Another benefit to using the AQI is that it is used throughout the country. If someone is traveling to a major city and has health concerns, they can find the daily AQI by watching television or reading a newspaper.

Using the AQI also allows the state to be included in EPA's ozone mapping program. By logging on to EPA's web site, anyone can see current air quality maps across the country.

DEQ continues to work with the public and the media to inform them of the AQI system. DEQ sponsored seminars on this topic at both the beginning and the end of the Year 2000 ozone season to keep them up to date with changes and innovations in reporting the AQI. Many television stations and newspapers are currently using the index and hopefully more will use the AQI in the future.



Atly Brasher gives an ozone summary for the Baton Rouge non-attainment area at a seminar held at the end of the ozone season for the media and the public.

If you wish to find out more information, please visit the following web sites:

DEQ homepage: [www.deq.state.la.us](http://www.deq.state.la.us)

EPA's AIRNOW homepage: [www.epa.gov/airnow](http://www.epa.gov/airnow)

Weather Channel Online: [www.weather.com/health](http://www.weather.com/health)

DEQ's Air Quality Hotline: (225) 765-2660